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10/530,560	04/07/2005	Juliane Kruesemann	268516US0PCT	8862
22850 7590 06/24/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER ABRAHAM, AMJAD A	
			ART UNIT 1791	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/530,560	Applicant(s) KRUESEMANN ET AL.	
	Examiner AMJAD ABRAHAM	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-21 and 23-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-21 and 23-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's remarks and amendments, filed on May 05, 2009, have been carefully considered. Claim 22 has been canceled and claims 27-31 have been newly added. Therefore, claims 10-21 and 23-31 are now currently pending.

New grounds of rejections based on amendments to claims 10 and 26 and addition of new claims 27-31

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 10-21 and 23-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. Specifically, claim 10 (line 10), claim 26 (line 10), claim 28 (line 7), and Claim 30 (line 7) each disclose the claim limitation "further customary constituents." It is unclear as to what constitutes constituents that would be added to the liquid colorant preparation.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 10,11, 14-15, 23-25, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thornber et al. (U.S. Patent No. 3,969,454) in view of Ortalano et al. (U.S Patent No. 6,503,317) and in further view of Stuart M. Lee (hereinafter, "Lee") [Lee, Stuart M. Handbook of Composite Reinforcements. (pp. 656-667). John Wiley & Sons (1993)]

5. Consider claims 10 and 30, Thornber teaches a process for producing a colored **(decorative ... color)**, oriented strand board **(particle board)** comprising **[See the abstract]**: contacting **(absorbing)** the wood strands which serve as a base material for at least one of the three layers **(designates surface layers and it is inherent that there is an uncolored inner layer)** of the oriented strand board with a liquid colorant preparation **[Column 1, Lines 19-28, 64-68 and Column 2, Lines 9-22]**; resinating **(adhesive binder)** **[Column 2, Lines 9-13]** and forming said wood strands into a three-layered mat **[Mattress with surface layers, Column 2, Lines 9-13]**; and hot-pressing said three-layered mat into said colored **[Column 1, Lines 15-18]**, oriented strand board comprising a center layer and two outside layers, wherein said wood strands serve as a base material for said colored, oriented strand board. **[Column 2, Lines 9-22]**

- a. Thornber does not specifically teach
 - i. (a) from 10% to 70% by weight of at least one pigment
 - ii. (b) from 0.05% to 7% by weight of at least one dye
 - iii. (c) from 1 to 50% by weight of at least one dispersant

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- iv. (d) from 10% to 88.95% by weight of water or of a mixture of water and at least one water retainer, and
 - v. (e) From 0% to 5% by weight of further customary constituents for colorant preparations.
- b. With respect to claims 10 and 30, in the same field of endeavor, Ortalano teaches a liquid colorant preparation which comprises at least one pigment and at least one dye. **[Column 4, Line 17 to Column 5, Line 60 and examples 1-28].**
- vi. (a) from 1% to 50% by weight of at least one pigment
 - (1) **[Column 5, Lines 5- 58]**
 - vii. (b) from 1% to 50% by weight of at least one dye
 - (2) **[Column 5, Lines 5- 58]**
 - viii. (c) up to 20% by weight% by weight of at least one dispersant, **(The pigment dispersions may also contain additives representing no more than 20 wt% of the pigment dispersion) [Column 6, Lines 1-18]**
 - ix. (d) From 10% to 88.95% by weight of water or of a mixture of water and at least one water retainer, and **(The amount of water added to the composition makes up the weight balance of the composition) [Column 5, Lines 59-67].**
 - x. (e) From 0% to 5% by weight of further customary constituents for colorant preparations. **(See, biocides, defoamers, and co-solvents) [Column 6, Lines 1-37]**

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c. The motivation to combine Thornber and Ortalano is seen throughout the disclosure of Thornber which can be considered to read on the claim limitation of applying a liquid colorant preparation (absorbing dye stuff) into wood particles used to make a wood composition board such as particleboard. Thornber envisions multiple methods which can be used to apply a color to a wood composition board such as absorbing the dye into the wood particles, vat dying, or staining. **(See column 1 line 64 to column 2 line 8)**. This dye absorption procedure is depicted in example 1 to example 3 of Thornber. **(See column 2 line 46 to column 3 line 7)**. Thornber does not explicitly disclose the specific components of the dyestuff used to color the wood composition board. Ortalano solves this deficiency by giving examples of dye, pigment, dispersant, and other additives that would be incorporated into a liquid colorant preparation to be used to color pulp, paper, coatings and textiles. **(See column 1 lines 13-16 of Ortalano)**. Thus, it would have been obvious to one having the ordinary skill in the art to modify the teachings of Thornber to include the teachings of Ortalano in order to apply a color to wood particles to be used to make wood composition boards such as particleboard or oriented strand board because pulp/paper and composition boards are both wood derived products.

d. However, the combination of Thornber and Ortalano does not expressly disclose the production of an oriented strand board. **(Although Thornber teaches that the invention taught in Thornber can be applied to a wide variety of surface patterns that depends on size, shape, or ORIENTATION**

of the particles. So Thornber indeed does envision the production of a particle board in an oriented fashion. See column 4 lines 1-30.)

- e. Still Lee, further teaches that the phrase "wood composition board" is used to describe wood panel products such as, fiberboard, medium density fiberboard, particleboard, waferboard, oriented strand board, oriented waferboard, and particleboard. Essentially Lee teaches that oriented strand board is part of a large family of wood composites which include the particleboard taught in Thornber. **(See page 656).** Lee goes on to teach that the process for making "wood composition board" is generally the same for particleboard and oriented strand board. **(See figure 1 on page 659).** The process disclosed in Lee states that it is well known to dry, blend, form, resinate, and press wood particles in order to form a wood composition board. Therefore it would have been obvious to one having the ordinary skill in the art to utilize a process for particleboard to make a process for coloring oriented strand board because particleboard and oriented strand board are well known equivalents in the known art.
6. Consider claim 11, Thornber and Ortalano remain applied to claim 10 above.
- f. Thornber teaches contacting occurs before said wood strands are dried. **[Column 2, Lines 45-52 (Example 1)].**
7. Consider claim 14, Thornber and Ortalano remain applied to claim 10 above.
- g. Thornber teaches wherein said wood strands are continually colored by spraying or dipping into a colorant solution or a dispersion. **(Dyebath..other**

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methods of coloring include vat dying and staining and absorbing into the wood) [Column 1 Line 64 to Column 2 line 8].

8. Consider claim 15, Thornber and Ortalano remain applied to claim 10 above.

h. Thornber does not teach wherein said liquid colorant preparation comprises 0.1-5.6 wt% of said dye.

i. With respect to claim 15,, in the same field of endeavor, Ortalano teaches the use of a dye between 1-50 wt%. **(Ortalano discloses that the coloring agents can contain between 1 wt% to about 50 wt %) [Column 5, Lines 5-58]**

9. Consider claims 23, Thornber and Ortalano remain applied to claim 22 above.

j. Thornber does not teach wherein component (b) comprises at least one anionic or cationic dye.

k. Consider claim 23, in the same field of endeavor, Ortalano teaches wherein component (b) comprises at least one anionic or cationic dye. **[Column 4, Lines 17-20]**

10. Consider claims 24, Thornber and Ortalano remain applied to claim 22 above.

l. Thornber does not teach wherein component (c) comprises at least one nonionic surface-active additive, at least one anionic surface-active additive, or a mixture thereof.

m. Consider claim 24, in the same field of endeavor, Ortalano teaches wherein component (c) comprises at least one nonionic surface-active additive,

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at least one anionic surface-active additive, or a mixture thereof. **(Defoamers, co-solvents, and surface active agents) [Column 6, Lines 1-17]**

11. Consider claims 25, Thornber and Ortalano remain applied to claim 22 above.

n. Thornber does not teach wherein said water retainer comprises a high-boiling organic solvent which is soluble in or miscible with water.

o. Consider claim 25, in the same field of endeavor, Ortalano teaches wherein said water retainer comprises a high-boiling organic solvent which is soluble in or miscible with water. **(Defoamers, co-solvents, and surface active agents) [Column 6, Lines 1-17]**

12. All references are generally directed to the "coloration of wood-based materials."

It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Thornber et al., by incorporating therein the dye based aqueous pigment dispersions taught by Ortalano. In this case the base invention of the prior art is that of a "Colored Particleboard" and the claimed invention improves on that technology by using a dye and a pigment in preparing the coloring agent to be used in the coloring process. However, the prior art has already used a dye and pigment in the coloring of other wood based materials. Because of this, the claims would have been obvious because the technique for improving a particular class of devices was part of the ordinary capabilities of a person of ordinary skill in the art, in view of the teachings of the technique for improvement in other situations. Furthermore, all of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions,

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and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

13. Regarding claim 31, Thornber does not teach wherein said liquid colorant preparation comprises from 0.5% to 10% by weight of said dye based on said pigment.

p. With respect to claim 31, in the same field of endeavor, Ortalano does not explicitly teach wherein said liquid colorant preparation comprises from 0.5% to 10% by weight of said dye based on said pigment. **(However, Ortalano discloses that the coloring agents can contain between 1 wt% to about 50 wt% of Dye and between 1 wt% to about 50 wt% of pigment...so if a solution had 50 wt% of pigment solution and only 5 wt% of dye solution the dye to pigment ratio would be 10% and thus read on the claimed invention. Therefore it would have been obvious to one having the ordinary skill in the art to use a liquid preparation which is 0.5% to 10% by weight of a dye based on said pigment) [Column 5, Lines 5- 58]**

14. Claims 13, 16-19, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thornber et al. (U.S. Patent No. 3,969,454) in view of Ortalano et al. (U.S Patent No. 6,503,317) and in further view of Stuart M. Lee (hereinafter, "Lee") [Lee, Stuart M. Handbook of Composite Reinforcements. (pp. 656-667). John Wiley &

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Sons (1993)], and in further view of Nakamichi (Japanese Patent Application 55-164142) already made of record.

15. Consider claim 13, Thornber, Ortalano, and Lee remain applied to claim 10 above.

q. The combination of Thornber, Ortalano, and Lee does not teach hot-pressing is conducted at a temperature of from 180 to 230 °C.

r. Consider claim 13, in the same field of endeavor, Nakamichi teaches hot-pressing is conducted at a temperature of from 180 to 230 °C. **(140-200 C)** [

Detailed description of the invention]

16. Consider claims 16-19, Thornber, Ortalano, and Lee remain applied to claim 10 above.

s. The combination of Thornber, Ortalano, and Lee does not teach wherein only one outside layer is colored in said colored, oriented strand board; wherein only both outside layers are colored in said colored, oriented strand board; wherein only said center layer is colored in said colored, oriented strand board; wherein both outside layers and said center layer are colored in said colored, oriented strand board.

t. Considering claims 16-19, in the same filed of endeavor, Nakamichi teaches wherein only one outside layer is colored in said colored, oriented strand board; wherein only both outside layers are colored in said colored, oriented strand board; wherein only said center layer is colored in said colored, oriented strand board; wherein both outside layers and said center layer are colored in

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said colored, oriented strand board. **(The colored wood chips can be used for the entire mat, or the colored wood chips can be used for the entire mat, or the colored wood chips can be used only for the surface, with ordinary wood chips being used for the inside and/or the surface) [Detailed description of the invention].**

17. Consider claims 20-21, Thornber, Ortalano, and Lee remain applied to claim 10 above.

u. The combination of Thornber, Ortalano, and Lee does not teach wherein when at least two layers are colored in said colored, oriented strand board, said layers have different hues and wherein when at least two layers are colored in said colored, oriented strand board, said layers have the same hue.

v. In considering claims 20-21, in the same field of endeavor, Nakamichi teaches wherein the particleboard can be made from a mixture of wood chips of several colors. **(See Page 3 lines 16-19, disclosing that many colors can be used to make a multi-colored particleboard. Nakamichi goes on to teach that each layer may be colored before the lamination, pressing, and curing steps--> see Pages 3 line 28 to page 4 line 6.)**

xi. Thus, it would have been obvious to one having the ordinary skill in the art to alter the hues of the different layers of wood chips based on the intended use of the wood composite board. The motivation would have been to color only one side of the board so that board with differing properties can be differentiated from each other after production. Clearly,

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if separate layers are colored separately it would stand to reason that different colors could be applied to the layers by one having the ordinary skill in the art.

18. All references are generally directed to the "coloration of wood-based materials."

It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Thornber et al., by incorporating therein the dye based aqueous pigment dispersions taught by Ortalano and the 3- layered mat discussed in Nakamichi. In this case the base invention of the prior art is that of a "Colored Particleboard" and the claimed invention improves on that technology by using a dye and a pigment in preparing the coloring agent to be used in the coloring process.

However, the prior art has already used a dye and pigment in the coloring of other wood based materials. Because of this, the claims would have been obvious to one of ordinary skill in the art at the time of the invention, because the technique for improving a particular class of devices was part of the ordinary capabilities of a person of ordinary skill in the art, in view of the teachings of the technique for improvement in other situations.

19. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thornber et al. (U.S. Patent No. 3,969,454) in view of Ortalano et al. (U.S. Patent No. 6,503,317) and in further view of Stuart M. Lee (hereinafter, "Lee") [Lee, Stuart M. Handbook of Composite Reinforcements. (pp. 656-667). John Wiley & Sons (1993)] and in further view of Iwata et al. (U.S. Patent No. 6,376,582).

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w. Thornber, Ortalano, and Lee remain applied to claim 10 above. However, the combination of Thornber and Ortalano does not teach when contacting occurs after said wood strands are dried.

x. In considering claim 12, in the same field of endeavor, Iwata teaches when contacting occurs after said wood strands are dried. **(Coloring agents... can be added ... in advance of wood fiber mixture and after drying)**

[Column 5, Lines 5-10 and Figure 1]

y. All references are generally directed to the "coloration of wood-based materials."

z. It would have been obvious to one skilled in the art at the time the invention was made to modify the teachings of Thornber et al., by incorporating therein the dye based aqueous pigment dispersions taught by Ortalano and the Wood Fiberboard and manufacturing method disclosed by Iwata.

aa. In this case the base invention of the prior art is that of a "Colored Particleboard" and the claimed invention improves on that technology by contacting the wood strands with a colorant after the wood strands are dried. However, the prior art has already used a process that dries wood strands before the coloring process. Because of this, the claims would have been obvious to one of ordinary skill in the art at the time of the invention because the technique for improving a particular class of devices was part of the ordinary capabilities of a person of ordinary skill in the art, in view of the teachings of the technique for improvement in other situations.

20. Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thornber et al. (U.S. Patent No. 3,969,454) in view of Ortalano et al. (U.S. Patent No. 6,503,317).

21. Regarding claims 26-28, Thornber teaches a particleboard colored with a colorant preparation. **[Column 1, Lines 1-28]**

bb. Thornber does not specifically teach

xii. (a) from 10% to 70% by weight of at least one pigment

xiii. (b) from 0.05% to 7% by weight of at least one dye

xiv. (c) from 1 to 50% by weight of at least one dispersant

xv. (d) from 10% to 88.95% by weight of water or of a mixture of water and at least one water retainer, and

xvi. (e) From 0% to 5% by weight of further customary constituents for colorant preparations.

cc. With respect to claim 26, in the same field of endeavor, Ortalano teaches a liquid colorant preparation which comprises at least one pigment and at least one dye. **[Column 4, Line 17 to Column 5, Line 60 and examples 1-28].**

xvii. (a) from 1% to 50% by weight of at least one pigment

(3) **[Column 5, Lines 5- 58]**

xviii. (b) from 1% to 50% by weight of at least one dye

(4) **[Column 5, Lines 5- 58]**

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xix. (c) up to 20% by weight% by weight of at least one dispersant, **(The pigment dispersions may also contain additives representing no more than 20 wt% of the pigment dispersion) [Column 6, Lines 1-18]**

xx. (d) From 10% to 88.95% by weight of water or of a mixture of water and at least one water retainer, and **(The amount of water added to the composition makes up the weight balance of the composition) [Column 5, Lines 59-67].**

xxi. (e) From 0% to 5% by weight of further customary constituents for colorant preparations. **(See, biocides, defoamers, and co-solvents) [Column 6, Lines 1-37]**

dd. The motivation to combine Thornber and Ortalano is seen throughout the disclosure of Thornber which can be considered to read on the claim limitation of applying a liquid colorant preparation (absorbing dye stuff) into wood particles used to make a wood composition board such as particleboard. Thornber envisions multiple methods which can be used to apply a color to a wood composition board such as absorbing the dye into the wood particles, vat dying, or staining. **(See column 1 line 64 to column 2 line 8)**. This dye absorption procedure is depicted in example 1 to example 3 of Thornber. **(See column 2 line 46 to column 3 line 7)**. Thornber does not explicitly disclose the specific components of the dyestuff used to color the wood composition board. Ortalano solves this deficiency by giving examples of dye, pigment, dispersant, and other additives that would be incorporated into a liquid colorant preparation to be used

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to color pulp, paper, coatings and textiles. **(See column 1 lines 13-16 of Ortalano)**. Thus, it would have been obvious to one having the ordinary skill in the art to modify the teachings of Thornber to include the teachings of Ortalano in order to apply a color to wood particles to be used to make wood composition boards such as particleboard or oriented strand board because pulp/paper and composition boards are both wood derived products.

22. Regarding claim 29, Thornber does not teach wherein said liquid colorant preparation comprises from 0.5% to 10% by weight of said dye based on said pigment.

ee. With respect to claim 29, in the same field of endeavor, Ortalano does not explicitly teach wherein said liquid colorant preparation comprises from 0.5% to 10% by weight of said dye based on said pigment. **(However, Ortalano discloses that the coloring agents can contain between 1 wt% to about 50 wt% of Dye and between 1 wt% to about 50 wt% of pigment...so if a solution had 50 wt% of pigment solution and only 5 wt% of dye solution the dye to pigment ratio would be 10% and thus read on the claimed invention. Therefore it would have been obvious to one having the ordinary skill in the art to use a liquid preparation which is 0.5% to 10% by weight of a dye based on said pigment) [Column 5, Lines 5- 58]**

New Grounds of rejection based on Applicant's amendment to claims 10 and 26***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 10 and 23-26 are provisionally rejected on the ground of nonstatutory

obviousness-type double patenting as being unpatentable over claims 1, 3-6, 11 of

copending Application No. 10/529,862 Krusemann et al. in view of **Thornber et al.**

USP 3,969,454. Table 1 below discusses the similarities between the competing applications.

<p>Instant Application (10/530560)</p> <p><u>Claim 10:</u></p> <p>A process for producing a colored, oriented strand board comprising:</p> <p>contacting the wood strands which serve as a base material for at least one of the three layers of the oriented strand board with a liquid colorant preparation</p> <p>which comprises at least one pigment (10-70 wt%) and at least one dye (0.05-7 wt% dye), 1-50 wt% dispersant, 10-88.95 wt% water, 0-5 wt% of further customary constituents for colorant preparations;</p> <p><i>[resinating and forming said wood strands into a three-layered mat; and</i></p> <p><i>Hot-pressing said three-layered mat into said colored, oriented strand board comprising a center layer and two outside layers, wherein said wood strands serve as a base material for said colored, oriented strand board.]</i></p>	<p>Copending Application (10/529862)</p> <p><u>Claim 1:</u></p> <p>A method for the decorative coloration of a product <u>selected from the group consisting of MDF, HDF and chipboard,</u></p> <p>comprising applying a <u>liquid colorant preparation</u></p> <p>that comprises at least <u>one pigment and, based on the pigment, from 0.5% to 10% by weight of at least one dye to the product</u></p>
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Instant Application (10/530560)	<p>Copending Application (10/529862)</p> <p><u>Claim 6:</u></p> <p>from 10% to 70% by weight of component (A),</p> <p>from 0°05% to 7% by weight of component (B),</p> <p>from 1% to 50% by weight of component (C),</p> <p>from t0% to 88.95% by weight of component (D), and</p> <p>From 0% to 5% by weight of further customary constituents for colorant preparations, each percentage being based on the total weight of the preparation.</p>
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Instant Application (10/530560)	Copending Application (10/529862)
<p>(a) from 10% to 70% by weight of at least one pigment,</p> <p>(b) from 0.05% to 7% by weight of at least one dye,</p> <p>(c) from 1 to 50% by weight of at least one dispersant,</p> <p>(d) from 10% to 88.95% by weight of water or of a mixture of water and at least one water retainer, and</p> <p>(e) From 0% to 5% by weight of further customary constituents for colorant preparations.</p> <p><u>Claim 23:</u></p> <p>Wherein component (b) comprises at least one anionic or cationic dye.</p>	<p>Claim 2</p> <p>(A) at least one pigment,</p> <p>(B) at least one dye,</p> <p>(C) at least one dispersant,</p> <p>(D) water or a mixture of water and at least one water retainer, and</p> <p>(E) Optionally further customary constituents for colorant preparations.</p> <p><u>Claim 3:</u></p> <p>Wherein component (B) of the preparation comprises at least one anionic or cationic dye.</p>

Instant Application (10/530560)	Copending Application (10/529862)
<p>(a) from 10% to 70% by weight of at least one pigment, (b) from 0.05% to 7% by weight of at least one dye, (c) from 1 to 50% by weight of at least one dispersant, (d) from 10% to 88.95% by weight of water or of a mixture of water and at least one water retainer, and (e) From 0% to 5% by weight of further customary constituents for colorant preparations.</p> <p><u>Claim 24:</u></p> <p>The process of claim 22, wherein component (c) comprises at least one nonionic surface-active additive, at least one anionic surface-active additive, or a mixture thereof.</p> <p><u>Claim 25:</u></p> <p>The process of claim 22, wherein said water retainer comprises a high-boiling organic solvent which is soluble in or miscible with water.</p>	<p>(A) at least one pigment, (B) at least one dye, (C) at least one dispersant, (D) water or a mixture of water and at least one water retainer, and (E) Optionally further customary constituents for colorant preparations.</p> <p><u>Claim 4</u></p> <p>Wherein component (C) of the preparation comprises at least one nonionic surface-active additive, at least one anionic surface-active additive or a mixture thereof.</p> <p><u>Claim 5</u></p> <p>Wherein the water retainer of the preparation comprises a high-boiling organic solvent that is soluble in or miscible with water.</p>

<p>Instant Application (10/530560)</p> <p><u>Claim 26:</u></p> <p>An <i>oriented strand board colored</i> with a colorant preparation which comprises</p> <p>which comprises at least one pigment (10-70 wt%) and at least one dye (0.05-7 wt% dye), 1-50 wt% dispersant, 10-88.95 wt% water, 0-5 wt% of further customary constituents for colorant preparations;</p>	<p>Copending Application (10/529862)</p> <p>A method for the decorative coloration of a product <u>selected from the group consisting of MDF, HDF and chipboard,</u></p> <p>comprising applying a liquid colorant preparation</p> <p>that comprises at least <u>one</u> pigment and, based on the pigment, from 0.5% to 10% by weight of at least one dye to the product</p> <p><u>Claims 11:</u></p> <p>An <i>article produced</i> by the method as claimed in claim 1</p>
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3. Although the conflicting claims are not identical, they are not patentably distinct from each other because both inventions claim a process for making oriented strand board using a liquid colorant preparation which includes a pigment and a dye. One of ordinary skill in the art would have been motivated to modify the claims of 10/529,862-- (Krusemann et al.) by altering the step of selecting from the group consisting of MDF, HDF, and Chipboard with the step of **oriented strand board** of the instant application. Furthermore, Thornber teaches that the invention taught in Thornber can be applied to a

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wide variety of surface patterns that depends on size, shape, or ORIENTATION of the particles. So Thornber indeed does envision the production of a particle board in an oriented fashion. The Krusemann application (10/529,862) does not teach **resinating and hot pressing**. However, these differences are conventional in the art as shown in Thornber et al USP 3,969,454. These differences are obvious because these additional steps are common knowledge in the art of making colored oriented strand board.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

1. Applicant's arguments filed May 5, 2009 have been fully considered but they are not persuasive and/or moot due to applicant's amendments.

2. **Applicant's Argument**

a. Applicant has consistently argued through their remarks that one having the ordinary skill in the art would not look to Ortalano to cure the deficiencies of Thornber because they are nonanalogous art.

3. **Examiner Response**

b. The motivation to combine Thornber and Ortalano is seen throughout the disclosure of Thornber which can be considered to read on the claim limitation of applying a liquid colorant preparation (absorbing dye stuff) into wood particles used to make a wood composition board such as particleboard. Thornber envisions multiple methods which can be used to apply a color to a wood composition board such as absorbing the dye into the wood particles, vat dying,

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or staining. **(See column 1 line 64 to column 2 line 8)**. This dye absorption procedure is depicted in example 1 to example 3 of Thornber. **(See column 2 line 46 to column 3 line 7)**. Thornber does not explicitly disclose the specific components of the dyestuff used to color the wood composition board. Ortalano solves this deficiency by giving examples of dye, pigment, dispersant, and other additives that would be incorporated into a liquid colorant preparation to be used to color pulp, paper, coatings and textiles. **(See column 1 lines 13-16 of Ortalano)**. Thus, it would have been obvious to one having the ordinary skill in the art to modify the teachings of Thornber to include the teachings of Ortalano in order to apply a color to wood particles to be used to make wood composition boards such as particleboard or oriented strand board because pulp/paper and composition boards are both wood derived products.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMJAD ABRAHAM whose telephone number is (571)270-7058. The examiner can normally be reached on Monday through Friday 8:00 AM to 5:00 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Phillip Tucker can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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AAA

/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791